S-E-C-R-E-T

13 November 1957

TO : Director of Logistics

FROM : Chief, Planning Staff

SUBJECT: OL Staff Study Re Feasibility of Applying EDP to the Agency Supply System

REF : Memorandum to DD/S from C/Management Staff, subject: Electronic Data Processing Feasibility Study for Supply Division, Office of Logistics," dated 19 August 1957

1. PROBLEM:

To determine the extent to which the Agency Supply system can be adapted to the recommendations contained in the EDP feasibility study prepared by the Management Staff, DD/S.

2. ASSUMPTION:

That the evolution of Agency operations will continue to require current changes within its supply system, thus precluding the establishment, at this time, of any supply procedure that would be inflexible in nature.

3. FACTS BEARING ON THE PROBLEM:

a. Evolution of Agency operations has resulted and will result in continuous modification to the Agency supply system.

b. Evolution of Agency operations has resulted in a substantial reduction of support rendered by Headquarters and has established a trend which indicates further reduction.

c. There exists within the present supply system an insufficient volume and workload to justify full EDP utilization.

d. The application of an EDP computer to the Agency supply system would not be economical.

e. The installation of an electronic computer would not result in dollar and personnel savings, nor would it make for a more efficient system.

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f. EDP does not provide for the flexibility required in a supply system that must support an Agency having responsibilities and conducting operations such as is found in CIA.

g. Speed of data processing and reporting is not of primary importance to Agency supply operations.

h. Utilization of EDP in a pooling arrangement, physicalled located away from supply operations, is not feasible.

i. Integration of an EDP computer, physically within the Office of Logistics, cannot be economically justified.

4. DISCUSSION:

a. Evolution

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[redacted]

esting logistical development is that much of the operational support now being rendered by Headquarters is taking the form of bulk package deals. Thus, it may be concluded that "policy experience" has prognosticated a continuing decline in the Headquarters supply volume and dictated the requirement for a supply system, the most important criterion of which is flexibility. In view of the foregoing and, inasmuch as the value of EDP depends upon volume and a reasonable degree of standardization, it is obvious that EDP is not particularly suited to the criteria of a CIA supply system.

b. Volume:

(1) Of the 20,000 line items, not less than 10% (2,000 L/I) and not more than 20% (4,000 L/I) represent line items having a

recurring monthly activity. (See paragraphs 2 and 3, Annex II, Tab A). The remaining items, in the main, represent historical data.

(2) More than 50% of the line items processed require manual editing (see paragraphs 2 and 3, Annex II; paragraph 4, Annex V; paragraph 4, Annex VI, Tab A).

(3) There are only approximately 526 line item transactions per day--201 representing receipts and 325 representing issues. Of these, less than 50% represent good stock numbers, thereby requiring manual editing.

(4) As conceded by Management Staff, only an approximate 90 minutes per day would be maximum utilization of the RAMAC by the Office of Logistics (see Management feasibility study, paragraph 5, Annex VI.)

(5) The program covering the forecast of material requirements has been eliminated.

(6) Modification and improvement of the current supply system would further reduce the need for EDP.

c. Economy:

(1) EDP installation would increase the annual supply costs by $18,600 plus, and create an additional "one-time" cost of $101,250 plus (see Annex IX and paragraph 8, Annex VI, Tab A).

(2) The installation of an EDP computer would not eliminate substantially the number of supply personnel now on board, if any. (See paragraph 8, Annex VI; paragraphs 2, 3, 4, 5 and 6, Annex V; and Annex IX, Tab A). In certain instances, savings due to reduction of lower grade MSD personnel would be offset by higher grade personnel being required for EDP.

(3) Further, economics is not the only criterion in Agency materiel support; security, and having the right thing in the right place at the right time are of primary consideration.

d. Flexibility:

(1) EAM, through punch card controls, offers greater flexibility.

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(2) The standardization of the Agency supply system to EDP application is not compatible, in the main, with the "modus operandi" which requires more of the human element and less of electronic methods--EDP unable to replace human judgment and decision. (See paragraph 2, Annex II, Tab A).

(3) See paragraph 4a and 4f(2).

e. Location/Utilization:

(1) Utilization of EDP in a pooling arrangement, physically located away from supply operations, is not feasible. Its integration within Logistics could not be economically justified, since EDP and EAM personnel would be duplicated and the workload would not be sufficient to warrant full EDP utilization. This problem becomes more complicated in light of the future Agency relocation at Langley.

(2) Further, the Agency supply system is unique and unlike that of any other Government agency or industry. Because of the many exceptions and special situations dictated by operations, it does not readily lend itself to rigidity and over-all standardization. Its most important functions and bulk of transactions require human judgment and knowledge beyond the memory of an electronic computer. This human element must of necessity be retained, with or without EDP application.

5. CONCLUSIONS:

In view of the foregoing and those additional facts presented in the comments contained in the attached Tabs A, B and C, it is concluded that:

a. Evidence presented by referenced study in support of EDP is at best somewhat elusive, and as such, is not sufficiently concrete to justify the cost, performance and administrative problems that would be incurred by EDP installation.

b. That past experience indicates that EDP is not sufficiently flexible to economically cope with the extenuating circumstances ever surrounding operational support requirements.

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c. That the volume of business conducted by Office of Logistics is not sufficient to justify the utilization of EDP.

d. That the present system, in the interest of efficiency, does have need of modification and such modification can be accomplished within the framework of the existing system.

e. That certain Management recommendations contained in the feasibility study can and should be incorporated into any future modifications of the Agency supply system.

6. RECOMMENDATIONS:

Based on the above, it is recommended that:

a. The Office of Logistics not concur, for the present, in the installation of the IBM RAMAC 305 as recommended in the feasibility study.

b. The Supply Division continue to develop and, if possible, accelerate its present management program with the objective of modifying the present system to that extent necessary to effect a simple, efficient, and economical system which will produce the best possible support compatible with Agency operations.

c. The Supply Division incorporate within their management program those Management recommendations contained in referenced feasibility study which will coincide with and enhance the objective of their program.

25X1A9A [redacted]

Attachments:
Tabs A, B, C.

CONCURRENCE:

25X1A9A [redacted]
Chief, Supply Division

13 November 1957
Date

APPROVED: 11/13/57
Date

25X1A9A [redacted]
Acting Director of Logistics

S-E-C-R-E-T

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Distribution:
1 - DD/S
1 - Comptroller
1 - Mgt. Staff
1 - C/SD/OL
1 - D/L
1 - OL/FS

OL/P[redacted] (8 Nov 57)

25X1A9A

S-E-C-R-E-T
Approved For Release 2003/04/17 : CIA-RDP78-04376A000100080002-2

TAB

Approved For Release 2003/04/17 : CIA-RDP78-04376A000100080002-2

GENERAL COMMENTS ON TAB A

REFERENCE: Electronic Data Processing Feasibility Study of Supply Division, Office of Logistics, dated 19 August 1957 (Conducted by the Management Staff, DD/S)

1. In order to determine the feasibility and subsequent advisability of EDP application to the Agency's supply system, it is believed proper to first make a brief statements as to the growth of the Agency supply system.

a. The Agency, unlike any other agency of the government or industry, is singularly different in its "modus operandi" and thus, is largely precluded from application of standardized accounting and supply practices; notwithstanding that its final accounting for funds and property bears executive and legislative approval.

b. By virtue of the unique and world-wide scope of its operations, which extend themselves into the many facets of both covert and overt tasks, the materiel support, per se, must be tailored to each specific task; consequently, the supply system must be tailored accordingly:

Requiring more of the human element and less machine methods than normally employed by other government agencies and industry.

c. The present system is based solely on Agency experience. Although it stems from early OSS days, it did not become uniform until 1952, when the basic installation was made. It is based entirely on Agency experience. It is constantly under review and improvements are continuously effected.

2. This Tab (A) contains only those comments concerning the reference as are directly related to, or aid in the analysis of, the application of EDP to the Agency supply system. Comments regarding those recommendations contained in the reference, which concern the management of the Supply Division without reference to EDP application, are set forth in Tab B.

3. Inasmuch as the bulk of the recommendations, suggestions, comments, etc., regarding application of EDP are contained in the annexes to the referenced study, comments contained herein are arranged in a like manner, i.e., comments concerning the contents of Annex II of referenced study are contained in Annex II of this Tab. Further, for ease of reference, each applicable statement from the reference is quoted and is then followed by comments. Said comments contain either concurrence or non-concurrence and reasons therefor.

Annex I

TABLE OF CONTENTS

NO COMMENT

Annex II
Tab A

Requisitioning in Conjunction with Catalog

1. "Under the present procedure of the Supply Division/OL, a requisition frequently calls for items which must be procured as well as items which are carried in stock. Approximately forty percent (40%) of the line items on requisitions are in the procurement category, either because they are normally carried as stock items or because the stock has become exhausted."

COMMENT:

Unless the forty percent (40%) figure is analyzed, it tends to imply that a goodly portion of the procurement action is a result of stock having become exhausted. This then would indicate that there exists a failure in maintaining proper stock levels and/or stockage on hand. A review of the past six (6) months action (April - September, 1957, inclusive), reveals that only 2.6% of all line items requested were coded due-out because of a failure to have proper quantities of these items on hand as normal stock. This review also reveals that 38.4% of the line items requested were coded for immediate procurement action (PA) because the items are not normally stocked.

2. "To determine whether an item is in stock or must be procured, 25X1 the [redacted] compares each line item with stock-status reports. If an item appears in stock, the stock-status report is manually up-dated (for both issues and receipts) until the next report is issued. The requisition is manually noted for any corrections such as unit of issue, price, etc. If an item is not on the stock-status report or if the supply appears exhausted, or unless a suitable substitute is found to be in stock, an extract of the requisition is made manually for procurement purposes and the action is noted on the requisition. In the case of a non-stock item or one which cannot be identified by the 25X1 [redacted] the requisition or the extract is referred to the Identification and Cataloging Branch for establishment of a stock number and nomenclature description and then referred 25X1 back to the [redacted]. In the case of an item normally carried in stock, but presently out of stock, the requisition or the extract is referred to the [redacted] 25X1
25X1 [redacted] for determination of a replenishment quantity to be purchased. All such items are then referred to the Procurement Division for purchase. As may be visualized, this entails a great deal of manual labor resulting in delays and marked up requisitions which later must be interpreted by others, multiplying the chances for errors."

COMMENT:

25X1A11B

25X1A11B The editing by the computer is based on the assumption [redacted] that the items requested have firm stock numbers. This assumption is erroneous.

25X1A11B [redacted] Regardless of this, however, the computer could only process approximately 50% of the editing. The remaining 50% of the items requested do not have stock numbers or, if cited, are not firm. Such items must be considered as "exceptions" which cannot be automatically processed by the computer and must be performed manually. Further, Intelligence operations are sufficiently complex and diverse (in scope, security, and requirements) as to so compound the problem of support as to place unusual emphasis upon the exercise of good judgment. In turn, such judgment is sufficiently complex, diverse, and sensitive as to preclude automatic decision by computer.

3. "Records of the Supply Division/OL indicate that as of 30 June 1957, the Identification and Cataloging Branch had identified 39,304 items of which 20,005 were carried on stock-status reports, indicating that some 19,300 items not carried in stock might be requisitioned. Many of the 20,005 items appearing on stock-status reports are not actually carried in stock. It is, therefore, quite possible for the number of line items requisitioned, but not actually in stock, to equal 50% of the total, causing the [redacted] to spend at least half of its effort in needless scanning of stock-status reports for items which must eventually be checked by the Identification and Cataloging Branch and rechecked again by the [redacted]

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25X1

COMMENT:

1. Of the 20,005 line items carried in stock, 8,114 line items reflect complete dormancy, in that no activity was shown for these items during the last twelve (12) months. The remainder (11,886) line items could therefore be concluded as active line items -- the extent of activity with respect to each line item has not been analyzed. This analysis would require an extensive detail study. However, in reviewing the major categories, whereby activity has occurred, it can be safely deduced that, in certain line items, the activity would be small, i.e., less frequent than once a month. A spot check of records reveals that of 19,368 line items on hand, a minimum of not less than 10% (2,000 line items), and a maximum of not more than 20% (4,000 line items) represented recurring monthly activity. This activity is centered primarily in groups five (5) and seven (7) categories. It is quite possible that a modification in the Agency supply system, which would eliminate daily administrative and housekeeping transactions, would result in a substantial cut-back in the volume of line items transactions. To retain on computer memory "historical" (non-active) and least-active items would, therefore, be most costly, if not prohibitive.

2. An examination of the last six (6) months experience (April - September 1957) reveals that 24.9% of all line items requisitioned were for items without stock numbers. This same 24.9% would have to be considered as exceptions and manually edited even under a computer operation. Applying the 24.9% to the above 11,886 active items would further reduce computer volume. Experience at other activities proved that all items not edited for shipment during computer operation must be researched for substitution and good stock numbers. Personnel would still be required to do this job. One of the biggest lessons learned by industry in computer operation is that ". . . a computer requires perfect in-put data . . . the cost of correction of errors and changes is very high." 1/

1/ AMA Seminar, New York City, September, 1957

4. "To date no complete catalog of stock items has ever been published. If a complete catalog containing only items carried "in stock" and another catalog containing only items which would have "to be procured" were published and disseminated throughout the Agency, and if separate forms for requisitioning items "in stock" and items"to be procured" were instituted simultaneously, the following benefits should accrue:"

a. Under the present manual system; generally:

(1) Only the requisitions for items "in stock" would have to be compared against the stock-status reports.

(2) Requisitions for items "to be procured" would be referred directly to the (proposed new) [redacted] 25X1
25X1 [redacted] for review and then go to the Identification and Cataloging Branch for flexowriter processing (see Annex VII).

COMMENT:

This is easier said than done. It is difficult even under a one catalog system to expect better than "fair" returns; much less could be expected under a two catalog system. Requisitions would be received which carried both "in stock" and "to be procured" items. This would result in extraction to other forms. A two catalog system would result in additional workload and possible confusion. Further, an additional form plus another catalog would be added to our system. An additional field workload would be created; since two forms would have to be utilized where one formerly did the job. Another file of stock lists would be created. Also, it would be necessary to change both catalogs, in those instances where an item has been coded for procurement action and finally turned into stock by virtue of project cancellation, etc., or if experience dictated that stockage is recommended. "Turn-ins" are most frequent, as are stock cleansing transactions.

"4. b. Under an RDP System; generally:

(1) The manual comparison of requisitions against stock-status reports for items "in stock" would be completely eliminated as this function would be performed by the computer (Tab C).

(2) Requisitions for items "to be procured" would follow the same procedure as outlined under para. a(2) above."

COMMENT:

The manual editing of all items not available as a result of computer processing would still be required. The U.S. Army Medical Depot at Louisville has determined it essential that all items not coded as shipped by the computer must be researched manually. It was further ascertained not feasible to edit on the computer for substitution action. This position was confirmed in the Harbridge House Study conducted for the Deputy Chief of Staff for Logistics, U.S. Army. As stated before, approximately 41.2% of all items processed through the computer would still have to be manually edited.

5. "Under present procedure requisitions originating outside of Headquarters may carry a [redacted] indicator and, in such cases, 25X1A2G
are referred directly to the Office of Logistics. However, it is then frequently necessary for the Supply Division to refer such requisitions back to an area (Headquarters) for approval of their Budget - Finance Officer and to a technical service (in the case of controlled items) for their approval. It is believed that referring all such requisitions directly to the area desk, eliminating the [redacted] indicator, for obtaining such 25X1A2G
approvals before going to Office of Logistics will speed up the supply service and relieve the Office of Logistics of much criticism for delays which may actually be the fault of the present system."

COMMENT:

1. See comment, paragraph 5, Annex II, Tab 'B'.

2. See, also, Instruction No. LI 42-300-1, dated 26 March 1956, entitled, "Use of [redacted] Special Indicator 25X1A2G
for Cables and Dispatches."

3. The [redacted] procedure is basically a procedure to establish 25X1A2G
a direct communication channel and to expedite the flow of routine administrative and housekeeping support requisitions and request for services from the field direct to Office of Logistics for action, and Office of Logistics advising the status thereof direct to field--the DD/P Headquarters elements receiving only information of action taken. This procedure has no direct bearing to EAM or EDP application.

25X1A11B

[redacted] 2G

[redacted] 2G

[redacted] 2G

6. "Present procedure requires many items to be carried in stock under one or more of eight different codes denoting 25X1A11B [redacted] one of up to 27 codes denoting allocation, and one or more of four codes denoting condition. In many cases, no stock level has been established for an item and in other cases, the established levels do not appear realistic. No complete record of item activity appears anywhere in the stock-status or other reports. Frequently one item arbitrarily may be substituted for another if the one requisitioned is out of stock. Many items on requisitions are not described in accordance with established nomenclature, making it difficult for the [redacted] or even the Identification and Cataloging Branch to determine exactly what is required. In the event of a property turn in, each item is held out of stock until every other item in the lot has been identified and coded."

25X1A11B

25X1

25X1A11B

COMMENT:

[redacted]

2. Allocation codes are required to earmark certain items for specific projects, missions, and strategic reserves. It enhances controls and offers a means to secure separate listings and reports. This same procedure is standard throughout the Defense Department and industry.

3. The problem of stock levels has been commented on in this Tab and more adequately explained in Tab B. In many cases, activity in certain line items would justify an establishment of a stock level; however, because of the support being "exceptional", "one-shot", "temporary", etc., prior experience dictates against the establishment of a "stock level." In other instances, "stock levels" appear unrealistic and cannot be supported by experience figures; however, they were established by DD/P Materiel Board action preparatory to forthcoming operations, targets of opportunity, etc.

4. The historical record available with EAM procedures is the same as can be made available with EDP. EDP does not eliminate the problem; it merely offers random selection.

5. Under EDP editing, limited substitution can be made by the computer, whereas under EAM stock editing, maximum substitution can be made. This is an EAM advantage.

"7. The feasibility team feels that:

a. Catalogs, as described in para. 4 above, should be published and disseminated immediately and should contain (in addition to full nomenclature for each item) for requisitioning purposes, the following:

(1) Full stock number

(2) A single noun description

(3) A "normal order quantity"

(4) A single [redacted] code (for the one most frequently requisitioned) 25X1A11B

(5) No allocation codes (as not essential for supply operations)."

COMMENT:

1. Concur in the comments contained in Tab B relative this subject.

2. A "normal order quantity" would prove in many instances as wasteful and expensive. Why buy more when less is required--all in excess becomes surplus requiring storage, surveillance, transportation, and such other cost involvements, not to mention eventual disposal action. A greater study of this problem would be required. Experience to date does not substantiate savings in "normal order quantities" across the board. The DD/P element, as a rule, does not desire to spend hard money on things they do not need, especially under an Agency policy to keep surpluses down. At best, shipments of more than actual quantity desired, would, in effect, result in transferring from one storage point to another of these averages.

25X1A11B [redacted]

4. Allocation codes are considered as essential both to the mission and to the supply operations just as they are considered necessary to the other logistic systems of the USAF, USA, and USN.

7. The feasibility team feels that:

b. "The requisition be re-designed in two forms --one to be used for "in stock" items only, the other for items "to be procured" only."

COMMENT:

Not concurred in (See Comment, Para. 4, Annex II, Tab A).

7. The feasibility team feels that:

25X1A11B

c. "Items that are required in larger than "normal order quantities" or with a [redacted] code other than the one specified under para. 7a(4) above should be requisitioned on the "to be procured" form."

COMMENT:

Not practicable in that it would inject into the system the preparation and processing of two separate documents. This would double the handling and routing of same. In addition, if the items on the document "to be procured" were in a favorable or excess stock position, it would be more practicable to issue from these assets than to initiate procurement action. If, on the other hand, the normal order quantities referred only to items not carried "in stock", but to the "to be procured" category, then other criteria would enter into the decision of how much should be procured. Procurement action could not be taken on a verbatim basis for many reasons, some of which were stated in comments to para. 7a, Tab A.

7. The feasibility team feels that:

d. "All items carried under "condition" codes one and two should be combined into one"available for use" codes."

COMMENT:

1. This may be possible; however, after a more thorough investigation, it is agreed that, for computer purposes, the consolidation of conditions 1 and 2 would be more feasible.

2. In those instances where shelf life enters into the picture, i.e., when the item itself has been procured in a new condition 1 category and by reason of non-issue has expired its dated deadline and placed in condition 2, it may be wise to be knowledgeable of such stocks. This is true in such items as film, medical, communications, TSS, explosive ordnance and ammunition. Knowing quantity of such stocks on hand helps stock management establish more practical stock levels and procurement scheduling.

7. The feasibility team feels that:

e. "All items carried under "condition code 3(needing reconditioning) and code 4 (not repairable) should be placed in a suspense account until made "available for use" by reconditioning, or disposed of as not repairable, and that all property turned in should also be placed in this account until properly identified, and released item by item as disposition is determined."

COMMENT:

1. There are a number of items, such as the weapon category, wherein the property may need reconditioning, but is still considered as usable and desirable for certain type missions, without actually going through a costly rehabilitation program.

25X1A11B

25X1A11B

2. The above examples merely point out that the "condition" problem is more complex than it appears on the surface. Any reclassification of condition codes would require a complete study in itself. The present Agency condition system was built on years of Agency experience which resulted in the current system as being the best possible under the circumstances.

7. The feasibility team feels that:

f. "Proper levels should be established for each item carried in stock."

COMMENT:

Concur, but, as indicated in Tab "B", it is easier said than done." This is more of a "truism" within the Agency supply system as against other agencies of the government and industry, in that experience factors are erratic and inherently are composed of many variables, thus requiring much human analysis and calculated risks.

7. The feasibility team feels that:

g. "A standard substitution procedure (where possible) for each item which might be temporarily out of stock should be established, and indicated in the "in stock" catalog."

COMMENT:

1. Do not concur in adoption of "in stock" catalog.

2. Concur in principle for inclusion of substitution data in stock lists. Such a procedure is standard with Military and other Governmental agencies. It is not commonplace with industry, however.

3. However much a substitution listing may be desired from a supply management point of view, experience indicates that operations will not normally accept automatic substitution without some further qualifications and coordination.

4. Further, an additional unnecessary and expensive workload would be required, including in-put changes to the computer, in order to maintain current changes not only to the primary item itself, but also to the substitution item(s). Also, the substitution item(s) would have to be carried as a primary item, and thus, would be listed twice.

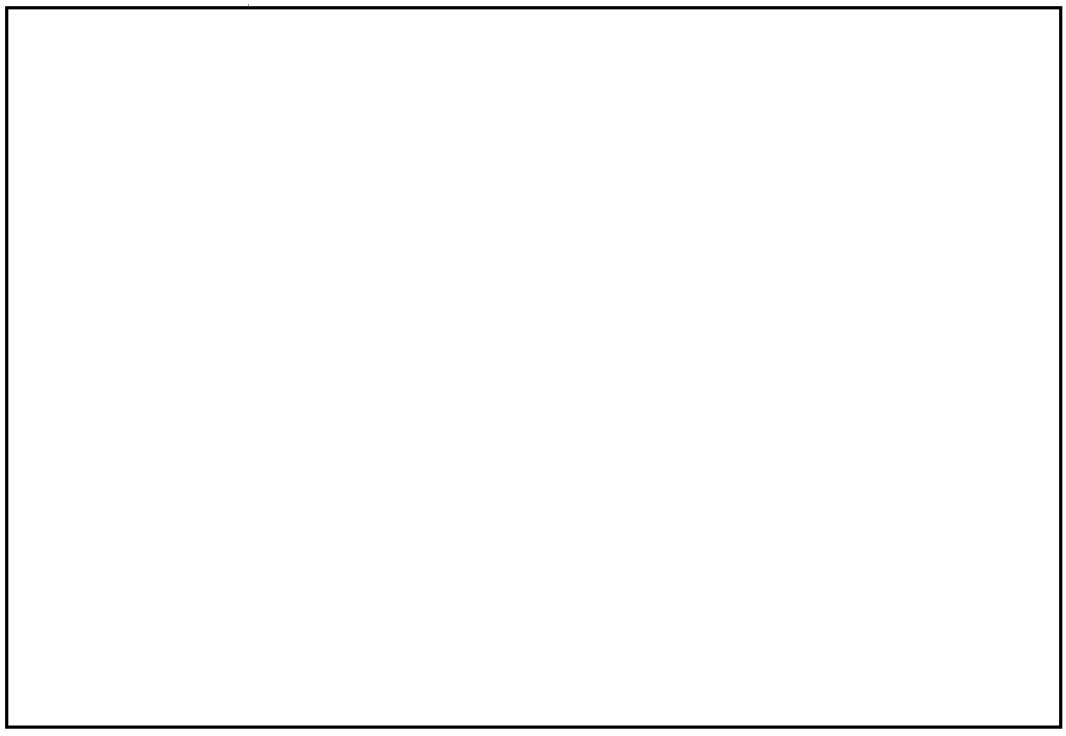
7. The feasibility team feels that:

h. "All stock items in which there has been no activity for one year should be eliminated by disposal, or placed in the "suspense account."

COMMENT:

1. This is a policy matter which would require coordination with other Agency elements. It would affect all phases of supply involving accountability, location of stocks, redistribution, disposal, etc. Movement between "active" and "suspense" accounts would involve supply transactions and additional computer workloads which are not required in the current system; thus this becomes a "make work" proposal.

25X1A11B



7. The feasibility team feels that:

i. "Any combustible ordnance item should be removed from warehouses containing other materiel, as constituting an unwarranted hazard in event of fire."

COMMENT:

1. Not pertinent to EDP.

2. See Comments, Tab, "B".

7. The feasibility team feels that:

25X1A6A j. "The [redacted] should be "in business" with complete stocks of items in normal demand, or "out of business" and used only as transshipping facilities (except 25X1A6A for [redacted] CSA procurement activities)."

COMMENT:

Not pertinent to EDP.

SAM REPORTS

"1. When this study was initiated, some 67 reports, Tab D, were being produced by Machine Records Division, Office of Comptroller, embodying data accumulated from transactions originating in the Supply Division, Office of Logistics. In reviewing these reports in the light of their distribution and use, this team has been unable to find justification for many of them and feels that some of them can be combined or replaced with more meaningful reports."

COMMENT:

1. Concur in any proposal that will eliminate unjustifiable reports; however, do not concur in their elimination without a detailed study of certain of those reports which affect the Supply Division (See Tab B, Annex III). Further, there are a number of reports which are prepared for other Agency components, such as Finance, which are not the problem of the Office of Logistics. It is suggested that reports such as these be referred to the proper Agency components. Time precludes a thorough study of the $84,000 savings claimed by virtue of eliminating the present 67 reports and substituting 15 new reports under EDP. However, attention is invited to the fact that the figure is predicated on the following assumptions:

a. That Agency components (other than OL) serviced by the present reports will be satisfied by the new reports.

b. That reports recommended for elimination are not necessary or pertinent to Supply Division operations--said recommendations have been refuted in part (See Annex III, Tab B)

c. That the 15 new reports will suffice OL requirements under the EDP system--an assumption that is vulnerable, when one considers that the study supporting the installation of EDP is a paper exercise resulting in a conclusion unsupported by experience. At best, assuming the above presents no unusual problems, this is an estimate and must be weighed accordingly.

2. Attention is invited to the fact that figures depicting savings (see par 2 & 3 of Annex III) are at first glance somewhat misleading, e.g., savings under a new manual procedure do not include administrative costs, whereas, those figures depicting savings under EDP include administrative costs; thus, enhancing the EDP claimed savings.

"2. Under a proposed new manual procedure, this team would eliminate 35 reports and combine 13 reports into 6. The justification for this action with respect to each individual report is presented in the attached Tabs E and F. Elimination of these reports would result in an annual savings of approximately $25,620, not including any savings in administrative costs, Tab G."

COMMENT:

Refer to paragraph 1, Annex III, Tab A)

"3. Under a proposed computer procedure, the team would eliminate all of the 67 reports presently being produced and substitute 15 new reports. The title, proposed distribution, and use of each of these new reports is set forth in the attached Tab H. This action would result in an annual gross saving of approximately $84,000, including administrative costs (See Annex IX)."

COMMENT:

Refer to paragraph 1, Annex III, TAB A).

Annex IV
TAB A

Examples Showing Advisability of Making
A Complete Management Study of Supply Division, OL

Annex IV

"1. The team making this study was organized specifically as an EDP Feasibility Team and not for the purpose of making a management study, as such. However, in charting procedures necessary in determining feasibility, it became apparent that certain areas in the Supply Division, Office of Logistics, might benefit from a strictly management study."

COMMENT:

Certain areas have benefited from this study (See Tab B for those recommendations accepted by Supply Division, OL).

"2. One of these is indicated by the flow chart, Tab I, prepared by the Supply Division/OL to show the current procedure in handling a requisition at Headquarters; flow chart, Tab J, prepared by the 25X1A6A [redacted] showing a continuation of this process at the warehouse; and the Supply Division/OL present requirements respecting the numbers of copies of requisition form 88, Tab K. Tabs L and M show this process step by step. Here, decentralization of functions has been carried to a point where control becomes burdensome beyond any possibility of economical procedure. A correction of this is suggested under a proposed new EAM-manual method of processing for both Headquarters and warehouse, Tab N. No estimate of savings which should accrue as a result of this suggestion has been made."

COMMENT:

Of great interest is the combination requisition and shipping format. A study has been under way for some time to develop a form which could be used for both purposes. To date, a suitable format has not been devised. This is largely due to the fact that 25X1 [redacted] the requisition portion is classified. This form and procedure, however, is not dependent upon an EDP operation since its application can be made to either EAM or EDP.

"3. Another area, not directly related to EDP, is the flow of both paper and material in the [redacted] In making an analysis 25X1A6A in this area, the team discovered that a simple requisition for a nontechnical cargo passes through 151 steps (Tab M) and involves the use of from 50 to 86 pieces of paper in a minimum of 22 forms. In this process frequent trips for "Control" purposes are made back and forth between the Locator Office and various stations in the warehouse, by devious routes involving many unnecessary steps of time-consuming travel. With respect to the bin area alone Tab O shows the present and proposed paths of material flow; and Tab Q shows an analysis of travel to be saved using the suggested paths--an average saving of 26.5%."

COMMENT:

Not related to EDP

"4. The EDP team presumes that the "control" reporting to the Locator is necessary to enable the Locator to answer inquiries regarding the shipment of material. Such inquiries undoubtedly arise because of the length of time presently required for material to be shipped from the warehouse - 5 to 20 days for material in stock.

25X1A11B

[redacted]

them. Speeding up shipment of material should result from the proposed new "Requisitioning in Conjunction with Catalog" process (Annex II) with resulting elimination of the most of the inquiries and, therefore, the necessity for "control." Straightening the paper and material flow paths should further eliminate much internal travel. Elimination of all unnecessary forms (now required in many cases because of "control") should do away with much paper work. No estimate of dollar savings incidental to the implementation of these suggestions has been made."

COMMENT:

Not related to EDP.

"5. The Locator records (at the depot) are presently contained in Kardox safe cabinets and depot document filing is maintained in 4-drawer safe files. Tab R shows the cost of these safes and the annual cost of floor space and (Locator) personnel required to maintain them. Tab S shows these costs under a proposed new manual system, using a Model Master rotary file for Locator and shelf filing for documents in a secure area. Tab T shows similar costs (without rotary file, which would be unnecessary) under a computer system. An analysis of these various costs indicated the following savings:

	One-Time	Annual
New Manual System	$13,228.41	$ 8,056.52
Computer System	14,293.41	12,136.52

Tabs U and V show floor space released and increase in utilization."

COMMENT:

1. The status as a result of the usage for locator purposes is not understood. Reference is made to par 3b, Annex VI. If the intent is to put the warehouse locator data into the computer and consider the end result as a momentary savings, then this appears erroneous. The input required to place the initial data into the computer and the action required to keep it current is a considerable job, both manually and in key-punch type operations. Savings, if any, could not be accepted as conclusive. It would almost be impossible to install standard warehouse location symbols in EDP memory, since portions of Agency stocks are held in other governmen. locations, under their own respective systems. To superimpose an Agency system on another government agency would be preclusive. To duplicate their system would be useless--an order on the Army releases our stocks as needed.

25X1

2. To set up locator codes on EDP memory for Agency-controlled [redacted] warehouses should not be considered. A standardized system would not be possible, since the items stored and the responsibilities vary with each depot. Local conditions, such as, warehouse space, labor, security, etc., may have a bearing. The volume and variety is not so large that a locally controlled system, coupled with personal warehouse familiarity of stocks, cannot operate adequately. Inclusion of locator codes on the EDP memory would use up expensive disc space unnecessarily. Further, inter and intra depot changes, whether from efficiency or policy dictates, would require continual correction of the memory discs--a costly process at best.

"6. Tab W and the photographs attached thereto are furnished for the purpose of enabling one, not familiar with the warehouse, to gain some visual understanding of the problems discussed."

COMMENT:

Not related to EDP

"7. The team feels that a complete management study of both the Headquarters and depot areas of the Supply Division/OL may very likely reveal other possible savings, and that it would be remiss in its duty by failing to offer a solution in the few areas brought to its attention."

COMMENT:

Not related to EDP. However, this may be worthwhile to consider in view of the contemplated Agency relocation to Langley. Agency supply operations may have to be decentralized further or, possibly, become more centralized.

ORGANIZATION AND FUNCTIONS

"1. a. Attached hereto is an Organization Chart of the Supply Division/ Office of Logistics, Tab X, and a statement of the mission and functions of that Division, Tab Y. The chart has been prepared to show in detail the subdivisions of the Supply Operations Branch and the [redacted] through which two components most of the paperwork producing data susceptible of electronic processing flows. The chart and statement of functions serve to indicate the extent to which decentralization of functions has been carried, thereby creating an overload of work in maintaining control."

25X1A6A

COMMENT:

Not related to EDP.

25X1 1. b. To accomplish its mission the Supply Division/OL has a T/O of [redacted] Of these, at least 60 are directly engaged full time, and an equal number part time in the paperwork. At Headquarters and the [redacted] this work involves the use of 50 forms which have been approved by RMS/MS and numerous other forms which have been created internally within the OL without such approval.

25X1A6A

COMMENT:

Not related to EDP.

"2. Electronic processing of such data in other organizations, both commercial and governmental, has invariably resulted in simplification of such manual operations as still may be necessary, and a significant reduction in the numbers of people required to perform equal functions. For example, in the Department of Health, Education and Welfare (Social Security Administration) the increase in the number of "Net Accounts Established" as of the end of FY 1956 over the end of FY 1939 was 167.8%, whereas the "Average Number of Employees on Duty During the Year" for the same dates increased only 14.7%. At a conference attended by members of this feasibility team in Atlanta, Georgia early this year, one of the metal fabricating companies reported an anticipated annual saving in clerical costs of $220,000.00. Others, such as Lockheed Aircraft and General Electric, while not furnishing specific figures, stated that their savings were very substantial It should be assumed, therefore, that this Agency could anticipate similar results from conversion to EDP and that the minimum savings indicated in paragraph 4 below represent a completely logical conclusion."

COMMENT:

1. In those instances where a tremendous like recurring volume can be rigidly processed within a standardized program, EDP may result in simplification of manual operations and may reduce significantly the numbers of people. The Agency Supply System does not possess such volume nor does it permit such inflexibility. It is a system based on many "exceptions" and "special cases" requiring more of the human element than of automation.

2. Although claims in savings have been anticipated by many companies, none have been substantiated in fact or published in order to evaluate. At the AMA Seminar, it was emphasized that there have been no reported savings by any company as a result of EDP. The installation of EDP at the Union Carbide Corporation resulted in a RED figure. Its justification, however, was on the basis of using the computer for use. 1/ Primary consideration should always be given as to what one can do with present EAM equipment before considering a computer. 2/. The Diamond Alkali Company of Cleveland has not accepted EDP for economics and other shortcomings. 3/. Both Canning 4/ and Kozmetaki 5/ in their recent computer publications, vividly cite shortcomings of current EDP machines. Stanley R. Klion, Manager, Management Control Department, of Peat, Marwick, Mitchell and Company, New York, very ably summarized EDP, viz.,

"Consideration must be given to the fact that Computers cannot run your business."

This is a truism which most aptly fits the Agency, whose business requires more of the human element as against speed and automatic memory.

3. The U.S. Army Medical Depot, Louisville, Kentucky, reported a potential savings of $16,053 for the month of May 1957 as a result of RAMAC 305A operations vs EAM. This saving was based on the monthly processing of 52,595 line items. These savings were progressively reduced as the pilot operation continued. In August 1957, the potential monthly savings dropped to $8,496. This was based on the monthly processing of 60,680 line items. A total of fifteen (15) organizational functions were involved. Potential savings were reflected in two (2) areas only, namely, DP&R and Stocks Accounting. The remaining thirteen (13) areas remained constant under both EDP and EAM. The RAMAC costs did not include the preparation of the following reports and items which were being prepared and costed under the EAM.

a. Daily Transaction Register
b. Daily Financial Statement
c. Receipt Take-up Listing
d. Financial Inventory Control Receipt
e. Costs covering the processing of prosthetic teeth requisitions
f. Costs covering the Hospital Equipment Assembly Program

It can be definitely concluded that the expected potential savings will become lessened as the operation progresses and all costs are included. (See EAM/EDP comparative cost analysis next attached). The officer in charge of this pilot operation has stated unofficially that ". . . When all the figures are in, he doubts very much that any savings which could be effected would be worth while." The latest evaluation report submitted by the U.S. Army Medical Depot to Deputy Chief of Staff, Logistics, U.S. Army, reflected an adverse position. The pilot model operation will continue however.

1/ Mr. James T. Scott, Assistant Manager, Electronic Data Processing Department, Union Carbide Corporation.

2/ IBID

3/ "Electronics in Action," Special Report No. 22 - American Management Association, Incorporated, 1957

4/ Richard G. Canning, "Electronic Data Processing for Business and Industry," John Wiley and Sons, Incorporated, New York City

5/ George Kozmetski and Paul Kucher, Electronic Computers and Management Control, McGraw-Hill Books Company, New York City

"3.

a. In electronic processing of data produced by the Office of Logistics, in connection with requisitions, purchases, receipts and reports, the following functions will be performed electronically:

General Function	Specific Functions Eliminated
(1) Editing	Manually comparing requisitions with stock status report to determine identity and availability of each line item; making extracts of items to be procured; up-dating of records of issuances and receipts on stock status reports, due-ins, due-outs, back orders; preparing and controlling coding sheets.
(2) Stock Management	Manually controlling stock level records, item activity, issuance of stock replenishment requisitions.
(3) Document Processing	Manually duplicating requisitions, receiving documents, and many supplemental documents, and eliminating much correspondence, filing and control logging.
(4) Receipts Control	All manual comparison and accounting activity.
(5) Locator	Manually maintained locator records at [redacted] 25X1
(6) Packing and Shipping	Manually produced documentation
(7) Machine Records	Necessity for producing many reports derived from OL data.
(8) Depot Stock Control	Most supervisory activity. "

COMMENTS:

(1) Editing - a. The manual comparison of items requisitioned against the stock list will still be required. Less than 58.7% of the line items requested are normally available and the remaining items still require screening for substitutes, purchase actions, cancellations, etc.

b. Preparation of extracts of items to be procured is not now normally accomplished. A copy of the original document is used in lieu of an extract.

c. In lieu of updating of records of issuance and receipts on stock status reports, an additional workload would be generated in that all follow-up inquiries or queries relative to status of stocks would have to be punched into the EDP unit for the information required. This is a workload which would further become cumbersome if the computer were physically located away from the source requiring the data. Security would become a problem and a greater possibility for error would be created due to telephone usage.

d. Coding is still required. Coding sheets would still have to be furnished to the key punch operator for EDP processing. Input to EDP is exactly the same as required for EAM and the human element is still required to code.

(2) Stock Management - The majority of this action would still have to be accomplished manually due to the type of Agency operation. A stock level based solely on issues would not be feasible nor desirable, especially where issues are erratic. The establishment of levels and the preparation of replenishment requirements is performed by most military depots using EAM equipment, but, for reasons mentioned prior, it is not recommended that this depend solely on levels prepared by machine operations. Automatic stock replenishment action would tend to build up unnecessary stocks causing further storage and disposal problems.

(3) Document Processing - a. The manual duplication of requisitions would still be required whether EAM or EDP methods are employed.

b. The bulk of the correspondence is [redacted] 25X1A2G
This cannot be eliminated unless [redacted] procedures are eliminated. Further, the [redacted] procedure is not related to EDP. It is an operational DD/P determination and one of Agency policy. It is 25X1A2G efficient, expeditious, and economical. 25X1A2G

c. The filing and logging of vouchers is an audit requirement. Audit actions utilizing EDP methods have not been accepted to date.

(4) Receipts Control - The maintaining of contracts, purchase order files, and due-in requirements must still be accomplished manually if such information is required. This information is required. This is the only record of obligations (dues-out) to the field of items on procurement action.

(5) Locator - The maintaining of locator data on the stock record cards can be done with either the EAM or EDP procedure. This, in effect, would require the manual preparation of the data at the warehouse, and keypunching into a card for input into a machine. This is not practicable. Additional work and much confusion would in all probability result.

(6) Packing and Shipping - Approximately 42% of the documentation would still have to be reproduced manually for those items purchased for direct shipment. If the elimination is based on both EDP and the flexowriter, then so much of the savings based on the flexowriter should be eliminated from EDP savings because it could be made applicable under EAM operation.

(7) No comments.

(8) Do not concur. The depot stock control activity is the "heart" of any logistic operation. The elimination of supervisory activity

would not only jeopardize the supply, but also, perhaps, the operation in fact. As explained elsewhere, the elimination of personnel in the depot stock control section cannot be agreed to as a matter of principle. The great number of "exceptions", "Special Handling", "Exigencies and Emergencies", and "Security" are merely a few reasons for supervisory control.

"3.

b. This should result in the elimination of at least 36 positions in the Supply Division/OL and 10 positions in the Machine Records Division (5 of whom would be replaced or retained as computer personnel -(see Annex VI), as follows:

25X1

[redacted]	8
	7
	8
	3
	2
	5
	2
	33
	3
	5

NOTE: It is understood that the [redacted] not included in these savings, is being abolished. 25X1

COMMENTS:

The study indicated that a total of 23 spaces in the [redacted] 25X1
25X1 [redacted] could be eliminated if EDP procedures were initiated. Dollarwise, personnel savings were the biggest factor and it appears that the recommendation to use EDP were based primarily on these monetary savings. The elimination of these positions is challenged in that the reduction would jeopardize the entire Agency supply system. An analysis of each position follows:

25X1 [redacted] (10 authorized and 8 recommended for elimination)

This unit is composed of 2 supervisors, 6 posters, 1 coding clerk for receiving documents, and 1 ditto operator.

Regardless of EAM or EDP procedures, the reproduction of either requisitions or shipping documents is mandatory. The ditto operator is therefore essential.

Under the present system, all receiving documents containing items which are sent directly from the receiving unit for shipment are not processed through a stock editor. They are coded by a coding clerk and processed as a "wash" (in and out) transaction. Under EDP, these documents would still require coding for EDP processing. As such, a coding clerk would still be required.

A total of 6 posters is currently assigned. Each issue received is reviewed for availability, substitutes, authorization, etc. The posters also code each document for EAM processing. If EDP application were made, all the documents would continue to be coded for EAM processing. Each item not available on the basis of computer editing,

would continue to be manually screened for substitution and procurement action. Further, if a common requisition and shipping format can not be developed, and this is a likely possibility because of security considerations, then the requisition would have to be manually coded as to the line item action taken. The original requisitioner requires this action information. In addition, the normal research for warehouse refusals, queries from customers, research for inventory, filling of voucher transaction registers for audit purposes must still be performed regardless of EDP or EAM procedures. Not more than 3 posters could be eliminated if EDP is adopted.

Stock Management

Do not concur:

a. The same management tools are available under either EDP or EAM as pertains to stock levels, consumption, issue experience, etc. A listing of requirements is prepared under the current EAM system but, due to the nature of the Agency activity, it is still necessary to review every line item to determine whether or not stockage is recommended. The changing conditions and many variables of each area to be supported prevent standardization of computation of stock levels to a point where a machine could compute a tactical requirement. An automatic action based on machine computation, without review by the human element, would not be consistent with an economical and efficient procurement, disposal, rehabilitation, and/or stock redistribution program.

b. It should also be mentioned that the Stock Management Staff performs other duties which, if automatically performed on EDP, without human review, could be meaningless, viz., availability and capability studies in support of continuing, changing, and "on-call" plans, programs, and projects; not to mention budgetary and other logistic coordination functions. It is possible, however, that some reorganization in this area could be made.

25X1 [redacted] people are authorized and 8 are recommended for elimination)

Four (4) of the positions service the [redacted] operation. Since 25X1A2G
25X1 [redacted] is Agency policy which must continue, EDP has no effect on this operation.

Two (2) of the positions are voucher clerks. Regardless of EDP, voucher registers and vouchers must be filed for audit purposes.

Two (2) of the positions are for scheduling and expediting customer requests. This activity coordinates emergencies and deadline dates with the area logistics officers, procurement, warehouses, editing clerks, etc. The elimination of this unit is not related to EDP procedures. Headquarters elimination would preclude an aggressive follow-up system.

One (1) position is a distribution clerk. This clerk is essential, under either EAM or EDP, to circulate requisitions, purchase orders, correspondence, etc.

The final position is the Chief of the unit. No justification should be necessary to have supervision over 9 employees.

25X1 [redacted] people are assigned and 3 recommended for elimination)

This unit maintains the status of all purchase orders, contracts, and letter authorizations. In essence, these are "due-ins" to the account and "due-outs" to our customers. The elimination of this unit would result in the loss of all status records. Of the receipts "due-in" for direct shipment to field activities, over 65% are for items not stock listed. These would not be processed on the computer and as such would have to be maintained manually; otherwise, there would be no status. The elimination of these people under EDP is not concurred in.

25X1 [redacted] Chief's Office (3 positions authorized and 2 recommended for elimination)

Past experience has proven that 3 is the minimum number necessary to supervise and administer such a large unit and its volume of correspondence. To eliminate 2 positions would be to jeopardize the entire operation.

25X1 [redacted]

Do not Concur:

a. The elimination of 5 people from the unit is predicated on the assumption that the computer would prepare the shipping documents and the manual preparation would no longer be required. This assumption is in error as only 59% of all line items are shipped from stock and 41% are procured and shipped direct from the warehouse after receipt from a vendor. The preparation of these documents would still have to be done at the warehouse. If they were prepared through the computer, it would delay the shipment as the computer would first have to process the receiving documents. The physical location of the computer away from this operation would further cause delay and invite other difficulties.

b. Also, if the intent of the study was to prepare on the computer a standard shipping document for all Agency shipments, to include transshipments from the [redacted] 25X1A6A
exceptions would have to be made to the standard procedure. On many occasions, these depots are called upon to prepare shipping documents consistent with cover. These shipping documents may take the form of [redacted] 25X1C4A
etc. On infrequent occasions, the [redacted] is also called 25X1A6A

25X1A11A

25X1

The 3 people may still be required under EDP to prepare locator status change notices to the EDP unit; file the suspense notices, and file the EAM cards received from the EDP center after machine preparation. Under any system, the warehouse must have a locator card under its own direct control for purposes of locating the storage space or when property is received.

Machine Records Division

There is employed an average of 9.5 employees for logistics and 5 are recommended for elimination. It is not believed that 5 positions are sufficient to input, analyze, program, operate, maintain, and supervise the operation of an EDP computer and the peripheral equipment. Considering it possible, however, the salaries of the 5 retained would be considerably increase due to the higher caliber and experience necessary for EDP operations. The MRD has expressed its opinion that the installation of a computer would at best eliminate two (2),and possibly only one (1) positions, if any.

25X1

(2 positions authorized and 2 recommended for elimination)

This unit maintains the accountability for detached stations and Headquarters activities. Financial property accounting (FPA) at the local level is being implemented for only detached stations at this time. When this program is completed, the FPA for detached stations in SPA will be terminated. The accountability for the Headquarters activities would still be required. It is possible that one position may be terminated, with or without EDP application.

Manual Workload

Attached hereto is a step by step procedure of the IBM RAMAC operation at USA medical depots. This further substantiates that a definite requirement exists for the type positions treated above.

Annex V
TAB A

Actual Procedures at USA Medical Depot Using EDP Methods

1. Cited procedure has been extracted from the "Report of IBM 305A RAMAC Automatic Data Processing System Test" prepared by the USA Medical Depot. A review of these procedures firmly established a fact that personnel are still required and a considerable amount of manual operation is still being accomplished, notwithstanding that EDP methods are used.

2. Other observations of interest relative to utilization of manual method within an EDP installation are as follows:

a. There are approximately 60,000 stock accounting transactions per month, of which 83% are requisitions. These requisitions are still manually coded to show the action. Action copies are then returned by mail to original requisitioner.

b. Items not available, when processed through the RAMAC, are "picked-out", screened, and processed manually.

c. The present substitution criteria cannot be performed by any type mechanical or electronic equipment.

d. There are still 32 manual steps required in processing a requisition through the RAMAC system. Editors, voucher clerks, coding clerks, document processing and review clerks are still required.

Annex V
TAB A

PROCEDURE FOR REQUISITION PROCESSING

Individual Involved	Procedure Step
Editor	1. Receives requisitions from Mail Clerk, Administrative Office, time and date stamps.
	2. Edits document for completeness of essential data, i.e., signatures, dates, authority, fund citations, etc.
	3. Determines processing priority based on date materiel is required and tags document "emergency" or "expedite" when required.
	4. Computes and assigns "Deadline Date" and "Latest Shipping Date".
Voucher Clerk	5. Assigns voucher number and enters document in voucher register.
	6. Prepares requisition folder, inserts "Consignee Copy" and forwards to [redacted] Section. 25X1
	7. Forwards "Accounting Copy" to [redacted] Section (Administrative Branch) 25X1
Coding Clerk	8. Affixes coding slip to requisition and enters appropriate codes
	9. Underlines in red information on document which is to be key punched. Forwards coded document to [redacted] 25X1 [redacted]ection 25X1
Freight Planning	10. Determines method of shipment and enters 5 digit address code and 5 digit cargo (address) code in spaces provided on coding slip. Forwards to [redacted] 25X1
Keypunch Operator	11. Keypunches and verifies header card (each voucher) and line item detail cards, maintaining proper sequence. Forwards cards with documents to RAMAC Operator.

RAMAC Operator

12. Processes cards with requisition program which updates issue balance, obligation balance (releases), and replenishable demand quantity while printing shipping mat complete with consignee address and other header information. The mat reflects the difference, plus or minus, between total amount of voucher and funds cited for financial control.
"No Record" items (incorrect stock numbers or non-stocked items) are automatically typed out.
Stock items which reach or go below the established low limit quantity are also typed out and reflect current balances which may be used in effecting procurement.
Detail transaction cards for each line item of stock drop are automatically punched for later use in preparation of transaction registers and reporting.
Financial Summary Cards for each voucher are punched for use in preparation of daily FID ledger.

13. Input header and detail cards are filed in suspense for 48 hours and then discarded.

14. Forwards shipping mats with requisitions to [redacted] 25X1

15. Sends RAMAC output cards to [redacted] 25X1

16. Transmits low limit report (typewriter output) to Administrative Branch thru [redacted] 25X1

EAM Section

17. Sorts output cards as follows:
    a. Financial Data Summary Cards
    b. Detail Cards - Shipment
    c. Detail Cards - Shortage

18. Files shipment detail cards in history file to be used for preparation of transaction register and for reporting.

19. Files financial data summary cards for preparation of daily FID ledger.

20. Interprets shortage cards and forwards to [redacted] 25X1

Document Processing & Review

21. Compares requisition with shipping mat to verify completeness of document and that action was taken on all items. Pulls applicable shortage cards.

22. Types additional information, if desired, on mat.

23. Checks shortage cards for substitute code. If present, refers to substitute list and notes substitute stock number and substitute quantity on the shortage card. Suspends remainder of shortage cards applicable to voucher and returns annotated cards to RAMAC through [redacted] Section for further processing. 25X1

24. Forwards all shortage cards, accompanied by proper shipping mats and requisitions to [redacted] 25X1

25. Checks remaining mats for minus adjustment amount (total of voucher exceeds amount of funds appropriated). These documents are pulled and transmitted with the requisition to the [redacted] Section. 25X1

26. Forwards completed requisitions on which no shortage occurred, together with the shipping mats, to the [redacted] Section for entry in voucher register and transmitted to Storage Division. 25X1

Administrative Section

27. Receives requisitions, mats and shortage cards from [redacted] Section. 25X1 25X1

28. Determines action to be taken on shortages; i.e., establish obligation, cancel shortage, authorize station procurement, extract to MMSA, etc. Annotates accounting copy of requisition.

29. Transmits shortage cards on which obligations are established with requisitions and mats to [redacted] Section. 25X1

Funding Section

30. Receives from [redacted] 25X1 those requisitions with mats where appropriated funds were exceeded.

    a. Posts data to financial control cards, suspends documents, and teletypes station for required additional funds.

31. Also, receives all requisitions and mats with shortage cards from [redacted] 25X1 25X1 [redacted]

    a. Releases for shipment, through the [redacted] Section, 25X1 those documents on which funds appropriated were not exceeded

    b. Where funds were exceeded, posts to financial data cards and teletypes for additional funds. (Documents may be released if items to be shipped do not exceed funds appropriated. Teletype will be sent for funds to cover dues-out which will be shipped at a later date).

32. Cards covering established obligations are sent to the Dues-out Clerk for filing pending shipment of stock.

"4. The estimated minimum annual savings in salaries for the above 33 positions, based on an average of the lowest grades employed in each of the components listed, equalling a middle step GS-7 at an annual wage of $5,000.00, would amount to $165,000.00."

COMMENT:

As indicated in comments to par 3, Annex V, the elimination of only 3 spaces in supply operations as a result of EDP could be concurred in at this time. The elimination of 5 positions at MRD is highly conjectural. Considering that approximately 50% of all transactions are "exceptions", this, in itself, eliminates 50% of the expected savings at the very outset. Further, some of the operations eliminated did not have any relation to EDP and, therefore, should not be considered as EDP savings.

"5. To review and code all requisitions before processing, establish proper stock levels, and maintain such other controls as still may be found necessary after installation of EDP. [redacted] 25X1 25X1

[redacted] the CS as to furnish the closest cooperation possible with the Procurement Division and the Identification and Cataloging Branch."

COMMENT:

25X1 [redacted] Do not concur. The present structure and manning of the Depot is required to support Agency-type operations. The new component would in effect be accomplishing the same functions, however, only under a new title (See also comments Tab B).

"6. To provide effective liaison with the several components of the Procurement Division/OL, the Identification and Cataloging Branch, Supply Division/OL should be placed in the Procurement Division."

COMMENT:

Do not concur (See Comments par 6, Annex V, Tab B)

"7. A complete management study of both the Procurement and Supply Divisions/OL, and perhaps of the entire Office of Logistics, should be made following the installation of a computer, to determine other areas of possible savings."

COMMENT:

This is logical if a computer is installed.

Annex VI
TAB A

Computer Requirements and
Estimated Cost of IBM 305 RAMAC

"1. In connection with this EDP study, the members of the feasibility team have attended various conferences and seminars and have read many treaties and books with the aim of acquiring the most current information regarding both the methods of making EDP feasibility surveys and the characteristics of various types of computers."

COMMENT:

1. The Office of Logistics had utilized its most qualified and experienced personnel in evaluating the feasibility of EDP application to the Agency supply system.

2. In addition thereto, the IBM 305 RAMAC was viewed in operation at the U. S. Army Depot, Louisville, Ky. A visit was made to the Sylvania EDP Center. Attendance was had at the American Management Association Seminar held in New York City, September 1957, wherein were expressed industries' views, both pro and con, as to feasibility of EDP application.

3. Many personnel within the Office of Logistics have machine methods experiences. Their views were solicited as to EDP application. Noteworthy mention is the actual experience which one member of Logistics Staff had in the USAF EDP Center in the Philippine Islands and 17 years experience in USA and USAF manual and EAM supply operations.

4. Further, many publications and studies were reviewed to obtain the current thinking on the subject.

"2. Agency requirements in the DD/S areas demand principally (in the opinion of this team) adequate alpha-numerical memory storage, instruction, storage, and the flexibility of Random Access to the memory. It appears that disc storage for memory has an advantage over drum storage in capacity and over tape storage in flexibility. Drum storage for instructions should suffice. At this writing (30 July 1957) the IBM 305 RAMAC (6 months delivery) and the IBM 650 RAMAC (9 months delivery after completion of a feasibility study approved by IBM) have distinct advantages in these respects over any other computer studied and available for reasonable prompt delivery."

NO COMMENT

"3. Inventory control requires a computer that will store and retain in memory all of the essential data required to furnish at any given moment the exact status of any inventory item. The IBM 305 RAMAC will, without the necessity of sorting data in accumulated batches of a given type, process each transaction as it happens and, at the same time, adjust every related record in memory storage. For example, when used for inventory control, issuances of shipping documents and compiling of replenishment requirements, it will simultaneously:

a. Determine availability, or substitute (Editor).

b. Note location in warehouse (Locator).

c. Enter receipts and calculate new average price (Receipts Control).

d. Price each item and calculate extension (Editor and MRD).

e. Adjust stock balances (Editor and MRD).

f. Accumulate activity of items (Stock Management).

g. Establish and adjust "Due-ins" and Due-outs" (Editor, Receipts Control and Stock Management).

h. Eliminate necessity for duplication of documents (Document Processing.)

i. Issue punched cards for financial accounting and preparation of any required reports (MRD).

j. Eliminate the necessity for much internal logging (Depot Stock Control).

k. Eliminate much of the manual key-punching of cards and collating of nomenclature cards (MRD).

l. Provide, at a moment's notice, the answer to any inquiry regarding the current status of any stock item for management consideration.

m. Other applications as may be found possible after installation or during programming."

"3"

COMMENT:

a. Availability and Substitution: It is possible but not practicable for the EDP computer to substitute. Item substitution was not being accomplished on the IBM 305 RAMAC at the USA Medical Depot. The Harbridge House Study prepared for the Deputy Chief of Staff for Logistics, U. S. Army, concurs that substitution on EDP computers is not practical.

The impracticability of automatic substitution by electronics becomes all the more highlighted within the Agency supply system, wherein the many complexities can only be resolved by the human element. Any machine substitution would still require human verification. This becomes all the more important where [redacted] security, and timeliness are paramount. As such, 25X1A11B it would appear at the very outset to be most inefficient to have EDP substitutions verified by the human element when the substitution in the first instance could have been performed manually with greater speed and accuracy. Some of the factors which render substitution by EDP methods impracticable are:

(1) Security considerations may limit substitutions to certain type models, year and country of manufacture.

25X1A11B [redacted]

(3) Condition of the item is often a factor.

(4) Packaging specifications may preclude substitution completely.

(5) In certain instances, it may be more economical and efficient to procure than ship from stock.

25X1A11B (6) Shipment of substitutes from a certain depot location may not be compatible [redacted]

(7) Most requisitions do not indicate whether substitutes will be acceptable. In most cases, the matter of a substitute has to be worked out on a person to person basis.

b. Warehouse Locator. The inclusion of a warehouse locator system on EDP records is possible, but not feasible. The amount of workload required to maintain an accurate status and processing of input data could possibly exceed our present workload.

To establish a locator system for the [redacted] 25X1A6A on EDP would not warrant the cost expenditure. The present system, with modifications, now employed locally is adequate and economical.

To establish locator systems for the [redacted] 25X1A6A overseas depots would not be feasible -- the local conditions, both storage and labor, sizes and types of buildings, etc., vary too greatly. Each depot must be considered as an entity unto itself, consistent with its cover. Further, it would be most difficult to establish a locator system for those depots

25X1A6A [redacted]

c. Concur

d. Concur - this, however, can be done with present EAM, although not as efficiently. The volume, nevertheless, is too small to warrant pricing adaptability to EDP methods.

e. Concur.

f. Concur.

g. Concur.

h. Duplication of Documents. This will be necessary under either EDP or EAM. If the reference is for use of one document as both a requisition and shipping document, then the same savings could be accomplished by using the one document in EAM procedure. The preparation of a multiple format has been under study by the Office of Logistics for some time.

i. Issues Punched Cards. Concur, however, the preparation of punched cards for financial reports is also done with EAM equipment.

j. Eliminate logging. The internal logging is dependent on how much control is desired. No logging is actually required and it can all be eliminated immediately under the present system, if it can be accepted that no documents will be lost. Nevertheless, it must be considered that approximately 42% of all documents, if processed under EDP, will be non-stock listed and will of necessity be processed manually as "Exceptions". In all such

instances, some logging would be necessary.

k. Eliminate manual key-punching and collating. There would be no great reduction in key-punching of cards. The input data remains approximately the same. IBM Key Punch 024 and Collator 077 equipment would still be required.

l. Query of stock status. The query as to the status of an item is more readily available under EAM due to the manual maintenance of the stock listings. Further, the personnel assigned to this task are thoroughly familiar with their respective stock categories, and, therefore, can more readily offer solutions or recommendations relative to specific line items. In EDP procedures, it is required that the stock number (or code number) is keyed into the computer in order that the proper information can be obtained. The inquiry can only be answered at the computer location site. The location of the computer away from the supply operation itself would not be efficient, since the hourly need for this information would tax additional courier and communication facilities; increase the chance of error; expose the inquiry to possible security breaches, and delay in finalizing each transaction. Substitution, procurement, and such other "special exceptions" would further add to delays. It is not possible to compute the number of daily inquiries which would be necessary. These, however, would be substantial.

m. Other applications. The RAMAC is capable of programming to its full capacity, and other applications can be generated, if so desired. Outside of Stock and Reports Control, the Office of Logistics does not see any other applications of a continued need at this time. The Office of Logistics is attempting to retain its supply programs to the minimum, viz., the recent discontinuation of requirements forecasting; proposed elimination of certain reports; manual performance of "one-time" programs as against using EAM; certain Agency Hot War responsibilities have been transferred to the military, thus further eliminating the necessity for certain programs. Other applications to utilize the RAMAC full capacity would therefore have to be generated by users outside of Logistics.

Annex VI
TAB A

"4. Figures compiled by the Supply Division/OL showing activity in Requisitions, Shipments and Receipts for FY 1957 are as follows:

	Received		Processed	
	Total	Monthly Av.	Total	Monthly Av.
Requisitions	18,314	1,526	17,426	1,452
Line Items	88,147	7,346	78,219	6,185
Shipments			52,399	4,367
Receipts			15,499	1,292 "

COMMENTS:

Concur. A more detailed breakdown of receipts and issues has been made to afford better analysis of daily workloads. The data was brought up to date, using the last six months' figures only.

Supply Transactions
April - September 1957

	ISSUES					RECEIPTS			
MONTH	DOC	L/I	V	L/I DO	L/I PA	DOC	L/I	L/I Direct	L/I Stock
Sept	1260	.5472	3373	178	1921	1350	3074	2126	948
Aug	1834	7928	4599	200	3129	1883	4262	3735	527
July	1239	5553	3507	103	1943	1653	3773	3460	313
June	1285	4793	2855	133	1985	1703	4106	3559	547
May	1734	7263	4140	225	2898	2377	5313	4466	847
April	1596	7740	4413	269	3058	1645	3616	3071	545
	8948	38929	22887	1108	14934	10611	24144	20417	3727
Monthly Aver.	1491	6488	3814	184	2489	1768	4024	3403	621
Daily Aver.	74	325	191	9	125	88	201	170	31

CODE:

DOC - Documents
V - Shipped
L/I - Individual Line Items
DO - Due-Out (Materiel not available when originally requisitioned, but back-ordered against stock due-in)
PA - Procurement Action (Not available and being purchased for direct shipment from the warehouse upon receipt)

The above daily averages were based on six months experience and were computed on twenty (20) workdays per month. The over-all daily average workload, counting both receipts and issues, is 526 line items. Percentage analysis follows:

	Line Items	Per Cent
ISSUES:		
Available and shipped on original requirements - includes substitutions	191	58.7%
Not available when requested and back-ordered Due-Out (DO)	9	2.8%
Not available and placed on procurement (PA)	125	38.4% 1/
Daily Total Issues	325	
RECEIPTS:		
Received and placed in stock (stock replenishment)	31	16%
Received and shipped direct to requestor	170	84%
Daily Total Procurement	201	

Of the total items requisitioned, 24.9% did not have stock numbers. 65% of all the items purchased were without stock numbers. Of all the line items received, 80% were actually for reshipment to field activities and were "wash" (in and out) transactions only. These were not posted to the manual stock listings by the stock editors.

1/ Substantial number of these are "non-stock" listed items and are processed as an accumulated single dollar figure - a one time "wash" (in and out) transaction.

"5. The feasibility team estimated that the time required for an IBM 305 RAMAC to process all of the data arising from requisitions, issues, purchase orders and receipts, involved in an average days' work for the Supply Division/OL would require 83 minutes. An IBM analyst, working independently from totals furnished by the team, prepared a computer flow chart, Tab Z, and estimated the time at 90 minutes. It may be concluded, therefore, that the IBM 305 RAMAC would suffice not only for the job under consideration but for such additional work as it may be possible to schedule within the limits of the computer memory storage."

COMMENTS:

Concur in the statement, except that there will be other tasks which must be performed prior to, during, and after computer action, such as, programming, preparation of input data, collateral use of peripheral equipment, and verification.

"6. The feasibility team has concluded that an IBM 305 RAMAC will suffice to satisfy the requirements for processing the data originated by the Supply Division/OL, providing the suggestions contained in Para. 7, Annex II are implemented, but will probably not be adequate for all components in the DD/S Area. However, the IBM 650 RAMAC should be capable of handling such requirements as they presently appear to this team."

COMMENT:

There is no doubt that a RAMAC IBM 305 would be able to satisfy the logistic requirements, providing that the additional costs could be warranted. Further, the application of the RAMAC to the Agency supply operations is based on the implementation of the recommendations made in the basic study. The acceptance of such recommendations would render the system less efficient and in certain aspects inoperable. As such, only certain logistic requirements could be satisfied with the RAMAC. These same requirements are met by the present manual/EAM system on a less costly and more efficient basis.

"7. Certain preliminary installation data has been furnished by IBM (Tab AA). While no detailed costs accompany this, it is felt that they will not exceed $10,000.00."

COMMENT:

The installation costs in all probability would be higher. The USA Medical Depot, Louisville, Ky., indicates installation costs of $12,803.78. These costs, however, did not include certain space preparation, such as partitions, floor, as these were already in place. The air conditioning was available; however the capacity had to be increased by 5 tons.

"8. An estimate of the cost of operating an IBM 305 RAMAC with peripheral equipment, for the work under consideration, is as follows:

	Machinery	Monthly Rental & Tax	
One 305	RAMAC	$3,200.00	
One 024	Key Punch	38.50	
One 056	Verifier	49.50	
One 083	Sorter	126.50	
One 077	Collator with Alphabetic Device	110.50	
One 407	Tabulator	1,028.50	
One 552	Interpreter	82.50	
One 514	Reproducing Punch	110.00	
One 047	Tape to Card Converter	170.50	
			$4,916.00

	Personnel		
One Chief, RAMAC Operator	GS-11	$ 532.50	
Two Key Punch Operators	GS-04	596.16	
One Machine Operator	GS-07	377.08	
One Programmer	GS-09	453.33	
			$1,932.07
	Materials		568.00
	Total Monthly Cost		$7,416.07
	Total Annual Cost		$88,992.84

COMMENT:

1. The experience of industry indicates that at least one (1) more programmer, one (1) Analyst, and one (1) maintenance engineer are required. The pay grade of GS-09 for a programmer may be low and a GS-11 may be required to fill this position.

2. The largest savings claimed by the feasibility study is in the savings of OL and MSD personnel. Comments to Annex V show that, of the 36 positions recommended for elimination, only 3 posters in the [redacted] and 2 operators in the MSD Branch could possibly be eliminated. 25X1

3. With no substantial savings in OL/Supply personnel and conceding that 5 personnel would be sufficient to operate the EDP/Supply section, it is interesting to note that the annual RAM cost of operations is $5,853.38 as against the $6,848.07 per month RAMAC

estimate (See next attached memorandum from C/MRD to C/PS/OL, dated 9 October 1957, subject: "Machine and Personnel Costs -- Supply Control Branch MRD).

Annex VI
TAB A

TO : Chief, Planning Staff,
Office of Logistics

Date: 9 October 1957

FROM : Chief, Machine Records Division

SUBJECT: Machine and Personnel Costs - Supply Control Branch/MRD

1. Attached is a recap of machine and personnel costs incurred in the preparation of reports for the Supply Division, Office of Logistics. These costs are based on the period 1 January thru 30 June 1957. Salary rates in the supervisory positions are the actual rates paid, however, in the grade GS-5 Operator and the grade GS-4 Key Punch positions rates are based on the second and fifth grade steps respectively. The machine rental is based on current rates.

2. The totals arrived at in the recap are based on six month's experience and are reduced to the average monthly cost. Therefore, the following considerations should be noted in order to obtain a more accurate assessment of the requirements necessary to produce the reports:

a. During peak work load periods, it has been necessary to use two type 407 and two type 403 Accounting Machines, four type 077 Card Collators, two type 514 Reproducing Punches, and two type 552 Card Interpreters in order to meet deadlines.

b. As a result of the uneven flow of source documents, the need for key punch and verifying machines and operators varies from zero to six during a month. For example, from July thru September 1957, thirty-four percent of the documents processed were received during the four days immediately preceding the cut-off.

c. There is no appreciable time lost due to machine failure as other machines normally are available within the Division.

[redacted] 25X1A9A

Annex VI
TAB A

PERSONNEL UTILIZATION

1 JANUARY 1957 - 30 JUNE 1957

Grade	Regular Hours Worked	Hourly Rate	Overtime Hours Worked	Hourly Rate	Total	Monthly Average	Average No. Of Employees
GS-9	949	$2.88	97	$3.63	$3,085.11	$ 514.19	1.0
GS-7	1754	2.24	234	3.36	4,715.20	785.87	1.6
GS-5	5314	1.83	673	2.75	11,575.37	1,929.33	5.0
GS-4	2010	1.76	-0-	-0-	3,537.60	589.60	1.9
	10,027		1004		$22,913.28	$3,818.99	9.5

MACHINE UTILIZATION

1 JANUARY 1957 - 30 JUNE 1957

Machine Type	Hours Used	Hourly Rate	Total	Monthly Average	Average No. Machines
024 Key Punch	1084	0.254	$275.33	$45.89	1.0
056 Verifier	1021	0.318	324.68	54.11	1.0
082 Sorter	603	0.349	210.44	35.07	0.6
083 Sorter	559	0.718	401.36	66.89	0.5
077 Collator	2640	0.858	2,265.12	377.52	2.5
403 Tabulator	73	3.656	266.88	44.48	---
407 Tabulator	1275	5.865	7,477.87	1,246.31	1.2
514 Reproducer	655	0.864	565.92	94.32	.6
552 Interpreter	70	0.476	33.32	5.55	---
604 Calculator	99	3.894	385.50	64.25	---
	8079		$12,206.42	$2,034.39	7.4

ANNEX VII

FLEXOWRITER PROCEDURE

No comment. Does not effect EDP.

Annex VIII
TAB A

Cost of Feasibility Study

"1. In submitting this report the team feels that the cost of making the study is a significant factor in arriving at possible net savings which may accrue from implementation of the recommendations."

COMMENT:

1. It is agreed that feasibility study brought out certain areas within the present supply system wherein improvements could be effected.

2. In those instances where the study recommendations were consistent with security, efficiency and sound supply management, the Office of Logistics is adapting its supply procedures to conform with such recommended changes (see comments Tab "B")

3. The Office of Logistics believes that the savings which will result by adopting certain recommendations contained in the study will more than offset the cost ($19,650) of the feasibility study. Mr. Stanley R. Klion, Manager, Management Control Department, Peat, Marwick, Mitchell and Co., New York at the AMA Seminar made this interesting statement regarding EDP feasibility studies.

> "The value of the study pays for itself by the review of current procedures. It may generate profitable savings by eliminating "fat" by this method of study. In some cases the study eliminates the need for a computer."

The Price Waterhouse report on the feasibility of installing a medium-range computer for the Diamond Alkali Company confirmed the company's earlier findings that an EDP installation was not timely at this time. This decision was based mainly on the fact that

> "Economics, based on accounting-only applications, were not adequate to support an Electronics Program." 1/

1/ See "The Diamond Alkali Verdict:"

"Not the right time for electronics." Electronics in Action, Special Report No. 22, American Management Association, Inc., 1957, pp. 41-48.

Annex VIII

ANNEX VIII
TAB A

"2. During the course of the study covering the past six months ten men have contributed varying amounts of time as follows:

GS-Grade	No. Men	Time Contributed	Salary Cost
15	1	1/3 month	$ 337.50
15	1	1/3 month	337.50
13	1	6 months	4,495.00
13	1	1 month	750.00
12	1	4 months	2,667.00
11	1	2 months	1,137.00
11	1	6 months	3,410.00
11	1	4 months	2,273.00
11	1	1 month	568.00
10	1	1/3 month	165.00
	10	25 months	$ 16,140.00"

COMMENT:

See comment Annex VIII, Paragraph 1.

"3. Eight of the ten men attended one or two conferences or seminars for a total of thirteen such trips at an estimated average cost of $250.00 each, the total amounting to $3,250.00."

COMMENT:

See comment Annex VIII, paragraph 1.

"4. The cost of special books, supplies, graphic and reproduction services, etc., estimated at $260.00

5. Total estimated cost of study is $19,650.00."

COMMENT:

See comment Annex VIII, par 1.

Annex IX
Tab A

Summary of Estimated Savings and Costs

"1. The savings and costs to be anticipated from implementation of the recommendations contained in this study are set forth in para. 2 below. For comparison, they are divided into two groups showing results from a revision of the current manual procedures:

a. Without a computer.

b. With a computer."

COMMENT:

See Comments, Annex IX, Para. 2

Annex II
Tab, "A"

"2. Exclusive of the cost of making this feasibility study (estimated at 19,650.00), the principal dollar savings and costs to be anticipated are:

	Without Computer		With Computer	
	One-Time	Annual	One-Time	Annual
Savings:				
25X1A6A Changes at [redacted] Depot (Annex IV)	$13,228.41	$8,056.52	$14,293.41	$12,136.52
Elimination of Safe Cabinets in MRD (Annex IV)	3,395.00		3,395.00	
Elimination of Reports (Annex III)		25,620.00		84,000.00
Organization Changes (Payroll) (Annex V)				165,000.00
GROSS SAVINGS	$16,623.41	$33,676.52	$17,688.41	$ 261,136.52
Costs:				
Computer Installation (Annex VI)			$10,000.00	
Parallel Operation (1 month)			7,416.07	
Computer Operation (Annex VI)				$88,992.84
GROSS COSTS			$17,416.07	$88,992.84
NET ONE-TIME SAVINGS	$16,623.41		272.34	
NET ANNUAL SAVINGS		$33,676.52		$172,143.68"

COMMENT:

1. This analysis concerns itself with computer savings only. No attempt has been made to analyze the savings which may result from the feasibility study, even though installation of EDP is not made. In this connection, however, the savings effected would be commensurate only with those recommendations which the Office of Logistics has accepted and concurred with (see Tab B for specific concurrences). Since all of the recommendations were accepted, it follows that the $16,623.41 "one-time" savings and the $33,676.52 "annual" savings would be reduced accordingly. It is believed, however, that whatever the savings would be, they would more than offset the $19,650 cost of the feasibility study.

2. The Office of Logistics analysis of the savings, which would accrue by reason of EDP application to the Agency supply system, follows below. The sequence follows that of the basic study.

No. 2 Continued

Annex II
Tab A

ANALYSIS OF COMPUTER SAVINGS AND COSTS

ITEM	With Computer One-Time	With Computer Annual	REMARKS
25X1A6A Savings:			
1. Changes at [redacted] Depot (Annex IV)	0	0	1. Do not concur. Preparation of locator in-put data; maintaining the system current and processing cards would in all probability exceed this cost.
2. Elimination of Safe Cabinets in MRD (Annex IV)	$3,395	0	2. Concur with reservations. The cost of storing historical and non-active information on EDP memory is prohibitive. A goodly portion of supply data falls into this category. Therefore, to effect a real savings in the use of the computer, such historical data should be stored on cards in safe cabinets. The savings claimed are therefore overstated.
3. Elimination of Reports (Annex III)	0	$58,380	3. Concur with reservations. A study was not made, but it is assumed that there would be savings to the extent of the reports eliminated. The difference between the $84,000 savings claimed in the feasibility study and the $58,380 shown here is the $25,620 difference in savings which would accrue if the changes were adopted in the current reporting, using EAM.

(Savings Continued)

	One-Time	Annual		
4. Organizational Changes Payroll (Annex V)	0	$12,000	4.	Concur only with respect to the elimination of only three (3) stock editors. All but three (3) of the people (3 stock editors) eliminated under the feasibility study are still required even though EDP application is made. Justification for this analysis is contained in the comments of the preceding annexes, specifically annex V.
Gross Savings . .	$3,395	$70,380		
Savings Claimed by Management Staff	$17,688	$161,137		

ITEM	With Computer One-Time	With Computer Annual		REMARKS
Costs				
1. Computer Installation (Annex VI)	$10,000	0	1.	Concur with reservations. This should be considered as minimum. Consensus at AMA Seminar revealed higher costs. The installation of the 305A RAMAC at Army Medical Depot, Louisville, Kentucky shows $12,800.
2. Freight	$ 5,000	0	2.	This item is not included in the EDP study. Covers shipping and handling charges from California.
3. Parallel Operation (6 months)	$45,000	0	3.	Do not concur. The feasibility study estimated a one-month parallel operation whereas the U.S. Army Medical Depot at Louisville has had a parallel operation over 6 months, and expects to continue same for an indefinite period. The consensus of AMA Seminar estimates parallel studies should be carried on from 2 to 3 and possibly 4 months. It is believed reasonable that the Agency cannot expect to do it in less than 6 months.
4. Feasibility Study (Annex VII)	$19,650	0	4.	This cost was not included in the feasibility study. This cost is considered by Office of Logistics as part of the initial cost, inasmuch as the persons conducting it were precluded from carrying out their normal assignments. It is a proper charge.

(Costs Continued)

	One-Time	Annual		
5. Programming and Debugging	$25,000	0	5.	This cost was not included in the study. On this item depends the success or failure of an EDP application. It is a real cost which must be absorbed. The estimate here does not appear to be out of line in view of industry's experience ranging from $25,000 to $300,000.
6. Computer Operation (Annex VI)	0	$88,993	6.	Concur with reservations. This is the same figure as used by Management Staff in feasibility study. It is believed to be low, as figures of from $100,000 to $200,000 were quoted by representative of industry at AMA Seminar, New York, September 1957. Peat, Marwick, Mitchell, and Company, New York in "Appraising the Economics of Electric Computers", quoted the operational costs of a medium scale computer at $105 per hour.
Gross Costs. . .	$104,650	$88,993		
Claimed by Management Staff	17,416	88,993		

Net "One-Time" additional cost. . . $101,255
Net "Annual" additional cost 18,613

3. The Office of Logistics contends that if the RAMAC 305 installation were approved, from an economics point of view alone, no "one-time" nor annual savings could be effected; specifically, an additional "one-time" cost of $101,255 and an "annual" cost of $18,613 would be incurred as against a "one-time" net savings of $272 and an "annual" net savings of $172,144 claimed by the Management Staff. These costs are in addition to present system cost of operations.

4. Mr. James T. Scott, Assistant Manager of EDP Department of Union Carbide and Carbon Corporation, who, as Chairman of the AMA Seminar, very ably summarized industry's position on costs and savings of EDP, viz.

> "People tend to underestimate the cost of EDP. . . Few companies, if any, have reduced costs. . .nothing published to date to support cost reductions. . . No one is really making money, at this time on electric processing."

5. Mr. Stanley R. Klion, Manager of Management Control Department, Peat, Marwick, Mitchell and Company, New York, had this to say at the AMA Seminar relative to EDP.

> "The preparatory costs are large. . .The annual cost of a medium computer will be from $100,000 to $200,000 per year. . .The computer is expensive. . .With regard to savings, I do not say there will never be a savings, but there has been none up to now."

"3. These figures do not include any estimate of collateral savings, which should be very substantial, in the use of the following equipment, supplies and services:

a. Typewriters, duplicators, adding machines, etc.

b. Headquarters space and filing equipment.

c. Paper and other supplies.

d. Filing time in components other than SD/OL.

e. Printing, courier, telephone and other services.

f. Records Management services and storage

g. Etc."

COMMENT:

1. Do not concur. The Office of Logistics fails to see where substantial collateral savings would result from elimination and/or partial reduction of equipment, supplies, and services relative to above categories.

2. True, in certain instances, savings may be effected; whereas, in other instances, costs may become greater. For example, if the EDP installation were physically located away from logistics operations, courier services, telephone costs, special communication facilities, corresponding services, supplies and equipment, would result in increased costs.

3. Savings in space may not be feasible. Under the present EAM setup, ten (10) IBM pieces of equipment are utilized (Appendix to Annex VI); whereas, under the proposed IBM 305 RAMAC installation, nine (9) pieces of equipment would be required--eight (8) peripheral plus the RAMAC (Annex VI). It should be noted, however, that the RAMAC requires more space than does ordinary EAM equipment.

4. Filing cabinet space would not be eliminated as a whole. The cost of storing historical data on RAMAC memory is prohibitive. As such, storage of such data would prove less expensive if stored on cards in cabinets.

5. The AMA Seminar, as well as the various EDP installations in government and industry, brought out that certain special type of office furniture and fixtures would be necessary.

6. The Office of Logistics does not understand where savings in "records management services and storage" would be effected. Outside of normal working files and card storage of historical data, the only other requirement would be for current reports. With or without the RAMAC, some of these reports would be rotated on a current basis at the 25X1A6A [redacted] Critical Files Center.

7. Other miscellaneous costs, such as machine tapes, wiring panels, initial expenses of training personnel, and, thereafter, maintaining this "know-how", conversion costs and costs incidental to "down-time" would become real.

8. The corallary savings claimed appear to be evasive in the sense that they may not become real savings, in fact. Until such time as "corallary savings" can become definitely established, the Office of Logistics is willing to concede that savings in one form would be off-set with increased costs in another form.